



Fermilab

LArIAT @ MTest ODH SYSTEM TEST PROCEDURE V1.0

OVERVIEW: This Procedure covers testing of the ODH monitor system after installation and for future tests that may be required. This test will check that the heads when sensing an oxygen deficiency will place the system in alarm, the appropriate horns and strobe lights will be activated and a FIRUS message will be sent to the communications center.

PREPARATION : The test should be conducted when the minimum amount of personnel are working in the area to reduce disruptive effect of blaring sirens and flashing strobes.

A team of two people equipped with radios and a test procedure would be adequate to conduct an efficient test. The test coordinator keeps the master record of the test.

Test Coordinator

Record data

Tester #1 Disconnect each ODH Head and Monitor zone horn and strobe

PROCEDURE: LArIAT at MTest BUILDING HIBAY

✓ Call the communications center (x3414) and notify the operator that a test of the LArIAT at MTest ODH system will be conducted and that you will need a printout of the FIRUS alarms they will receive during the test.

✓ Call the Main Control Room(MCR) (x3721) and notify the operator that a test of the LArIAT at MTest ODH system will be conducted and they will receive FIRUS alarms during the test.

✓ Set the HIBAY ODH ventilation Fan 1 to auto mode. This fan should be off.

FIRUS TAG NAMES:

07.MC7.0DH for Alarm

07.MC7.0DH.EQ for Trouble

✓ Check the team is in place and ready.

TEST HEAD # 1 (AE-819-V) Piping Skid

- ☒ Horn/Strobe activated in overhead door
- ☒ Horn/Strobe activated in Entryway
- ☒ HIBAY Ventilation Fan 1 Start and Run
- ☒ iFIX HMI ODH picture displays ODH Alarm
- ☒ FIRUS system received message. TIME: 08:54
- ☒ ODH chassis display is correct 19.4 %

TEST HEAD # 2 (AE-820-V) Detector

- ☒ Horn/Strobe activated in overhead door
- ☒ Horn/Strobe activated in Entryway
- ☒ HIBAY Ventilation Fan 1 Start and Run
- ☒ iFIX HMI ODH picture displays ODH Alarm
- ☒ FIRUS system received message. TIME: 08:54
- ☒ ODH chassis display is correct 19.4 %

TEST HEAD # 3 (AE-823-V) Overhead Door

- ☒ Horn/Strobe activated in overhead door
- ☒ Horn/Strobe activated in Entryway
- ☒ HIBAY Ventilation Fan 1 Start and Run
- ☒ iFIX HMI ODH picture displays ODH Alarm
- ☒ FIRUS system received message. TIME: 08:58
- ☒ ODH chassis display is correct 19.5 %

TEST HEAD # 4 (AE-824-V) Bottom

- ☒ Horn/Strobe activated in overhead door
- ☒ Horn/Strobe activated in Entryway
- ☒ HIBAY Ventilation Fan 1 Start and Run
- ☒ iFIX HMI ODH picture displays ODH Alarm
- ☒ FIRUS system received message. TIME: 08:58
- ☒ ODH chassis display is correct 19.5 %

TEST ODH TROUBLE

- ☒ Disconnect DC supply Fuse in ODH Control Box
- ☒ ODH chassis display is correct 20.8 %
- ☒ FIRUS system received message. TIME: 08:59
- ☒ iFIX HMI ODH picture displays ODH Trouble

AFTER TEST IS COMPLETED:

- ☒ Check that the ODH system is reset and ready to return to normal operation.
- ☒ Call the communications center (x3414) and notify the operator the test of the LArIAT at MTest ODH system has been completed and to respond to any further alarms. Pick up a copy of the FIRUS alarm printout from the communications center and record the times in the master test.
- ☒ Call the Main Control Room(MCR) (x3721) and notify the operator the test of the LArIAT at MTest ODH system has been completed and to respond to any further alarms.
- ☒ Generate a copy of the master test for any logs and the safety review panel.

SUPERVISOR OF TEST *Dan Markley*

DATE: 4/1/2015

TEST FORM---Dan Markley 4/1/2015

07.MC7.ODH	Emergency	IN-ALARM	4/1/2015 8:54	Meson Center 7	ALARM
07.MC7.ODH	Emergency	NORMAL	4/1/2015 8:54	Meson Center 7	ALARM
07.MC7.ODH	Emergency	IN-ALARM	4/1/2015 8:56	Meson Center 7	ALARM
07.MC7.ODH	Emergency	NORMAL	4/1/2015 8:56	Meson Center 7	ALARM
07.MC7.ODH	Emergency	IN-ALARM	4/1/2015 8:57	Meson Center 7	ALARM
07.MC7.ODH	Emergency	NORMAL	4/1/2015 8:57	Meson Center 7	ALARM
07.MC7.ODH	Emergency	IN-ALARM	4/1/2015 8:58	Meson Center 7	ALARM
07.MC7.ODH	Emergency	NORMAL	4/1/2015 8:58	Meson Center 7	ALARM
07.MC7.ODH.EQ	Emergency	IN-ALARM	4/1/2015 8:59	Meson Center 7	ALARM
07.MC7.ODH.EQ	Emergency	NORMAL	4/1/2015 9:03	Meson Center 7	ALARM

FIRUS
LOG FILE
4/1/2015